

IOWA HIGHWAY RESEARCH BOARD

Minutes of December 13, 2001

Regular Board Members Present

J. Adam	M. Nahra
J. George	J. Odgaard
D. Julius	D. Osipowicz
B. Keierleber	J. Selmer
R. Krauel	J. Witt
K. Mahoney	

Alternate Board Members Present

S. Andrlé for L. Greimann	J. Ites
L. Brehm for W. Weiss	G. Miller
R. Gould for S. Larson	W. Nixon
	C. Van Buskirk

Board Members With No Representation

T. Myers

Secretary

M. Dunn

Visitors

Clare Schroeder	<i>Iowa Concrete Paving Association</i>
Sara Buseman	<i>Iowa Department of Transportation</i>
Ed Engle	<i>Iowa Department of Transportation</i>
Elijah Gansen	<i>Iowa Department of Transportation</i>
Jim Grove	<i>Iowa Department of Transportation</i>
Larry Jesse	<i>Iowa Department of Transportation</i>
Mohammad Mujeeb	<i>Iowa Department of Transportation</i>
Wally Rippie	<i>Iowa Department of Transportation</i>
Bob Steffes	<i>Iowa Department of Transportation</i>
Robert Cody	<i>Iowa State University</i>
F. Wayne Klaiber	<i>Iowa State University</i>
Paul Spry	<i>Iowa State University</i>
David J. White	<i>Iowa State University</i>
Terry Wipf	<i>Iowa State University</i>
Dale Harrington	<i>Iowa State University/CTRE, Ctr. for PCC Pavement</i>

The meeting was held in the Large Materials Conference Room at the Iowa Department of Transportation, Ames, Iowa. The meeting was called to order at 1:00 P.M. by John Adam.

Agenda Review/Modification

- Agenda items 3, Problem Statement, “Reduction of Concrete Deterioration by Ettringite Using Crystal Growth Inhibition Techniques, Phase II - Field Evaluation of Inhibitor Effectiveness”; and 4, Final Report, TR-440, “Field and Laboratory Evaluation of Precast Concrete Bridges” were switched to accommodate a schedule conflict for the presenters.

Approval of the Minutes

- Mark Nahra moved to approve the minutes from the October 26, 2001 meeting with no additions or corrections. Kevin Mahoney seconded. Carried with 14 yes, 0 no, and 0 abstaining.

Final Report, TR-440, “Field and Laboratory Evaluation of Precast Concrete Bridges”

- Dr. Terry Wipf, Iowa State University, presented the information on the project survey; field and laboratory testing, including ultimate strength testing and post tension strengthening; and analysis of the data for the four bridges involved in this research.
- Dennis Osipowicz moved to accept the final report. Lyle Brehm seconded. Carried with 13 yes, 0 no, and 1 abstaining. (Funding: \$137,580 - 85% Secondary, 15% Street)

Problem Statement, “Reduction of Concrete Deterioration by Ettringite Using Crystal Growth Inhibition Techniques, Phase II - Field Evaluation of Inhibitor Effectiveness”

- Dr. Robert Cody, Iowa State University, reviewed results from the previous related study, which was a laboratory study only. He presented information on a field evaluation, including strength testing; 6 test sites, 3 rated “good” for performance and 3 rated “poor” for performance by the Iowa DOT; and anticipated results of the proposed 2 -year research project.
- The approach will be to add the inhibitor to the deicing chemical or to the rock salt for application. This study will not show the effects of traffic spreading the rock salt off the highway, but there are studies that review that type of information. This study should give an idea of the effects of weather on the inhibitor’s effectiveness.
- Mark Nahra moved to approve the problem statement and invite Dr. Cody to bring a proposal back to the board. Kevin Mahoney seconded. Carried with 14 yes, 0 no, and 0 abstaining. (Proposed funding: \$130,811 - 80% Primary, 10% Secondary, 10% Street)

Discussion, TR-461, “Soil Stabilization of Non-Uniform Subgrade Soils”

- Dr. David White, Iowa State University, gave a summary of the project, which was approved by the IHRB at the June 29, 2001 meeting. He gave information on the tasks of the project, including the progress made to date; the funding mechanism; the IPRF proposal cover page; and information on IPRF possibly reinstating the funding review process in March (currently the program is suspended).

- The initial goal was to use IPRF funds to complete the technology transfer and develop and distribute a design guide (with a nationwide goal). If the funding doesn't come through IPRF, industry would be approached about providing those funds.
- The initial proposal was approved with the contingency of matching IPRF funding. The point of bringing this project back to the IHRB was to request approval to proceed with testing (there are currently 2 field projects that are appropriate for testing) and use the previously approved funds of \$70,000 prior to having the IPRF funding in place.
- Regardless of what happens with the technology transfer and design guide, the board would still receive a report for the IHRB project TR-461.
- Jim George moved to allow Dr. White to proceed with the research using IHRB funding. Mark Nahra seconded. Carried with 14 yes, 0 no, and 0 abstaining. (Funding: \$70,000 - 60% Primary, 35% Secondary, and 5% Street)
- It was requested that Dr. White keep the board posted on the IPRF or other funding.

New Business

Selection of new Chairperson for 2002 for IHRB

- John Adam reported that the selection of IHRB Chairperson for 2002 is on hold until after discussion between staff and the universities due to the "Conflict of Interest" concern.

Old Business

Letter from State Senator Steve King concerning high-density polyethylene pipe

- Kevin Mahoney reported that he is planning to meet with Senator King when they can coordinate their schedules. After meeting with him, Kevin Mahoney will pass the information back to the IHRB.

Progress report on USGS report

- Roger Gould reported that a meeting was being coordinated by Dave Claman, Iowa DOT, and would be held during the week of December 17 to discuss the USGS report. The problem is well understood by the parties involved, but the solution is uncertain at this time. Roger Gould will bring conclusions to the board after the meeting.

John Adam adjourned the meeting.

Date of Next Meeting:

THE NEXT MEETING WILL BE HELD FRIDAY, JANUARY 25, 2002 AT 9:00 A.M. IN THE LARGE MATERIALS CONFERENCE ROOM, AT THE IOWA DOT, CENTRAL COMPLEX, IN AMES, IOWA.

Mark Dunn, IHRB Secretary